

ABSTRACT

A self-cleaning filter for use in a valve is disclosed. The valve can include a bore, an orifice disposed in the bore for accommodating a fluid flow therethrough, and a filter disposed in the bore between the input port of the fluid flow being filtered and the orifice being protected. The filter can include an entrance head in predetermined spaced relationship with the bore of the valve to define a filter entrance and a body portion. The entrance head can be configured to prevent particles of a predetermined size from entering the filter entrance. The body portion can include at least a portion that has a different shape than the entrance head which cooperates with the bore to define a fluid passage. The fluid passage can have an exit port which is communicable with the orifice to send filtered fluid to the orifice. The filter can include an offset portion which extends beyond an end face of the bore which is useful to develop pressure gradients which provide for a self-cleaning function. In some embodiments, the filter can include an integral orifice.